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ABSTRACT

There were many indications that Peyton Forest improved their reading program during the 1972-73 school year. These included the following: (1) The pupils had a program in reading that was shown to be effective when compared to other programs within the school system. (2) On skill exercises in contextual and phonetic decoding, the pupils demonstrated their knowledge of the skills learned by scoring 90 per cent accuracy on the tests. (3) It was reported that pupils answered questions in their daily work in which they made inferences, identified the main idea of a paragraph or story, remembered details, and recognized the organization and sequence of a story with at least 90 percent accuracy. (4) the pupils showed their abilities to answer questions concerning the use of library materials with 90 per cent accuracy. (5) The Comprehensive Instructional Program contributed to the instructional program by providing materials for systematic diagnosis of reading in grades one through three. (6) Data were not available to prove that those pupils taught by aides in the Career Opportunities Program made statistically equivalent gains to those pupils who were not taught by COP personnel. (7) The Instructional Assistance Program continued to enhance the total instructional program by providing a lead teacher and three aides who (i) released the classroom teachers for planning time in reading; (ii) assisted the teachers with instructional activities and the preparation of materials; and (iii) provided enrichment activities in art, music, and physical education for pupils. (Author/JM)

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RESEARCH AND DEVELOPMENT REPORT

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NURTURING INDIVIDUAL POTENTIAL THROUGH MEANINGFUL EDUCATIONAL EXPERIENCES

PEYTON FOREST ELEMENTARY SCHOOL
1972-73

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TABLE OF CONTENTS

	Page
RATIONALE	1
Supporting Services	5
NEEDS OF PUPILS	6
GOALS OF THE PROGRAM	7
BEHAVIORAL OBJECTIVES	7
VARIABLES	8
MANAGEMENT AND CONTROL	8
PROCESS	10
EVALUATION	12
FINDINGS	13
Objective A	13
Objective B	15
Objective C	17
Objective D	18
Objective E	19
Objective F	19
Objective G	20
ADDITIONAL FINDINGS	24
Reading Survey	24
Comprehensive Instructional Program	25
Instructional Assistance Program Aides	28
Teaching Personnel's Attitude	28
COST ANALYSIS	31
CONCLUSIONS	33
RECOMMENDATIONS	34

LIST OF TABLES

Number		Page
1	Pupil Achievement Study Using the Iowa Tests of Basic Skills, April, 1973, Peyton Forest Elementary School.	14
2	Results of the Vocabulary and Word Analysis Subtests on the Iowa Tests of Basic Skills	16
3	Results of the Reading Comprehension Subtest on the Iowa Tests of Basic Skills	18
4	Comparison of Favorable Responses on the School Sentiment Index Primary Level	21
5	Comparison of Favorable Responses on the School Sentiment Index, Intermediate Level . . .	22
6	Comparison of Favorable Responses on the Self-Appraisal Inventory	23
7	Comparison of Favorable Responses on the Self-Appraisal Inventory	23
8	Results From the Comprehensive Instructional Program Tests	25
9	Effectiveness of the Instructional Assistance Program Aides at Peyton Forest Elementary School (N=13), 1971-72 and 1972-1973	29
10	Correlation Matrix of Teachers, and Aides' Attitude Toward Education Scores, Indices of Predicted Quotient and National Norm Quotient of the Instructional Programs of 32 Atlanta Schools, 1972-73	31
11	Cost Analysis, Total School Average Daily Attendance (ADA)	32

I. RATIONALE

Peyton Forest Elementary School, located in southwest Atlanta, began operation of the school at the opening of the 1968-1969 school year. The school site of 25 acres is adjacent to a park site of 15 acres. This provides an unusually beautiful setting. The first phase of development of the community park was initiated during the 1971-1972 school year.

The open plan design was utilized in the construction of the Peyton Forest Elementary School building. This facilitates the team teaching and nongraded organization. Capacity of the school is 500 pupils.

The core of the school building is called the commons area. This is a large area which is utilized in various ways. For example, large groups meet for instructional purposes, audiovisuals are used with extremely large groups, assemblies are held, tests are administered, displays are made, programs are presented, indoor physical education activities are taught, and the like.

Instructional areas, designated as ells, the media center, cafeteria, faculty rest rooms, and the administrative area form the perimeter. Each ell comprises instructional space, a teacher's work room, a storage room, rest room facilities for boys and girls, an outside exit, and a wet area (containing one or more drinking fountains, a double sink, and an uncarpeted area).

The school community reflects a considerable variety of housing patterns and services available. Residential housing includes old and new single family dwellings, apartments, townhouses, and condominiums. Housing ranges from beginning blight (evidence of continued neglect) to upper middle class homes. Large undeveloped areas are scattered throughout the community. Future development of the vacant land is a community concern. The northern boundary includes commercial establishments. Service stations, banks, night clubs, a mortuary, an animal hospital, florists, package stores, a building supply firm, and used car lots represent the services available.

The housing pattern also suggests a wide income range. Retired persons with fixed incomes as well as persons active in sales, services, and the professions are community residents. Approximately

twenty-one per cent of the parents requested applications for the Atlanta Public Schools free or reduced price lunch program during the 1972-73 school year.

Although it may or may not be written, every school has a basic philosophy. The principal and faculty at Peyton Forest have a written philosophy which is as follows:

> We, the principal and faculty of Peyton Forest Elementary School, acknowledge the importance of educational programs. It is our intent to develop citizens who will simultaneously lead satisfactory personal lives as they contribute to the development of American democracy. Emphasis is directed to the nurturing of individual potential, the provision of meaningful experiences and the acquisition of skills.
>
> We believe that:
>
> 1. The child is the most important element in our school program.
>
> 2. Each child has his own unique pattern of growth and development and should be accepted and encouraged to achieve his fullest potential.
>
> 3. The instructional program and all other experiences within our school should be derived from the needs of the child.
>
> 4. Opportunities for continuous progress for each child can best be provided through an approach which disregards the stigma of grade lines, utilizes the abilities and talents of teams of teachers and involves the total school staff.
>
> 5. Continuous evaluation is a prerequisite to the instructional program of each individual child. Total evaluation demands close cooperation between home and school.
>
> 6. Our school is an integral part of the community and should have well established and continuing positive relationships with parents, community agencies, and resources.

The general objectives for the school included the following:

1. To provide experiences to determine the present levels of performance of each child.

2. To plan an instructional program which develops the unique potential of each child and allows him to proceed at his own rate.

3. To organize teams of teachers and utilize the nongraded process.

4. To establish positive communication between our school and the community.

5. To evaluate continuously the educational program in relation to the needs of the child.

The enrollment at Peyton Forest has always been under capacity. However, the primary ell has always reflected a larger number of pupils than any other area in the building.

Pupils were originally assigned to Peyton Forest under the freedom of choice approach. The pupil population began and developed as predominantly black. The pupils numbered 276 at the end of the first attendance month. Two white pupils were enrolled and remained throughout the year.

The faculty for the first year consisted of twelve full-time black and three full-time white members. In addition, the staff included .8 black and .5 white enrichment teachers.

The pupil population and the number of white pupils enrolled showed an increase in the 1969-70 and 1970-71 school years. Seven white pupils were enrolled in 1970-71 at the beginning of the school year. During the 1971-72 school year four white pupils were enrolled at the end of the first school month. However, all had moved out of the school population by the last school month. No white pupils are presently enrolled; the student body is totally black at present.

The establishment of attendance zones for each school in keeping with the federal court order resulted in many pupils being zoned out of the school. Near the close of the 1971-72 year a large segment,

135 pupils, were transferred to other schools. This represented approximately one-third of the pupils who were involved in the Instructional Assistance Program (IAP). The closing of the West Haven School at the beginning of the 1972-73 and the subsequent reassignment of approximately eighty pupils to Peyton Forest introduced another large group of new pupils.

The following data represents the mobility index for the 1972-73 school year:

PUPILS ENTERING AFTER THE FIRST ATTENDANCE MONTH

	Levels							
	1/1	2/4	3/3	4/0	5/0	6/1	7/1	Total/10
Boys								
Girls	3	3	2	1	0	0	2	11
Totals	4	7	5	1	0	1	3	21

Of the 21 pupils, 18 entered as TT (transferred from another Atlanta public school), 2 entered as T (transferred from another Georgia school), and one entered as TS (transferred from out of state).

Withdrawals. The second attendance month's withdrawals totaled nine. Of the nine, one withdrew to enter a private school, one moved from the city, and seven transferred to another Atlanta public school.

The third attendance month's withdrawals totaled eleven. Of the eleven, one was withdrawn through the authority of the visiting teacher, two moved to Fulton County school attendance areas, and eight transferred to another Atlanta public school.

Faculty turnover has been frequent. The challenge of team teaching, the nongraded organization, maternity leaves, resignations resulting from transfers of husbands, in addition to the lottery (administrative transfers in compliance with court order), have been contributing factors.

A significant factor has been that since the opening of the school, the faculty and pupils have had to do continuous orientation.

None of the teachers had taught in schools where the pupils had been previously enrolled. This factor led to staff concerns in regard to achievement in reading. Test scores from the Comprehensive Instructional Program (CIP) and Metropolitan Achievement Tests (MAT) provided supportive data. This concern crystallized at the Instructional Development Institute which was held during the summer of 1971. The eight staff members involved in the Institute (six classroom teachers, a librarian, and a principal) decided that emphasis upon the area of reading and language arts would be a more feasible approach to implementing staff concerns for the 1971-72 school year.

The utilization of the Instructional Assistance Program (IAP) during the school year 1971-72 resulted in a positive gain, in the area of reading, for the school. However, in comparing the achievement scores, especially in reading, it was noted that for the school year 1971-72 the pupils were below the effective and acceptable local and national norms, respectively. Based on these findings, the staff decided to concentrate its efforts in the area of reading for the 1972-73 school year.

Supporting Services

The regular budget of the Atlanta Public School System, federal and state assistance, and community services provided the following resources for the instructional program at Peyton Forest:

A. Comprehensive Instructional Program

During the 1970-71 school year, the Comprehensive Instructional Program (CIP) provided a basis for each elementary school to plan its own comprehensive reading program. After the identification of problems by the principal, coordinators, resource people, and teachers using the Georgia Education Model (GEM) evaluation instruments; inservice training was provided for teachers to insure growth in reading for each pupil through diagnostic teaching. Accordingly, Peyton Forest implemented a comprehensive reading program using the GEM evaluation instruments during the 1971-72 and 1972-73 school years. Although no one person was assigned to work with the CIP only, the lead teacher and teachers asked for assistance from the area office personnel as needed.

B. Instructional Assistance Program

The Instructional Assistance Program (IAP) provided a team consisting of a lead teacher, an art educational aide, a music educational aide, and a physical education aide. The lead teacher advised the aides and provided inservice training and supervision. The three aides gave assistance to the teachers by duplicating materials, operating audio-visual equipment, working with small groups of pupils, and the like. Additionally, the team provided educational activities in art, music, and physical education while freeing the regular teachers for group planning in the area of reading. Since the IAP team had the advantage of having worked together during the 1971-1972 school year, the members of the team, were able to work together much more effectively during the 1972-73 school year.

C. Career Opportunities Program

All three of the Instructional Assistance Program aides were involved in the Career Opportunities Program (COP) training program. In the COP, the paraprofessionals were enrolled in accredited colleges and working toward professional certification. These three aides made it possible for the pupils to benefit from an improved instructional program.

II. NEEDS OF PUPILS

The needs of the pupils identified by the school staff were as follows:

A. To improve in overall reading skills.

B. To demonstrate in testing situations their knowledge of skills learned.

C. To improve in the knowledge and application of library and reference skills.

D. To develop more fully their abilities to respond creatively.

E. To develop skills needed for performing silent and oral reading tasks.

F. To improve self-concept and attitude toward school.

III. GOALS OF THE PROGRAM

The goals were based on the identified needs of the pupils. They were as follows:

A. To provide comprehensive learning experiences which will utilize a variety of teaching techniques geared toward compensation of pupils' deficiencies.

B. To develop specific reading skills needed to make satisfactory progress at their individual rates.

C. To provide an atmosphere which will be conducive to creative thinking.

D. To provide an atmosphere which will increase positive self-concept and positive attitude toward school.

IV. BEHAVIORAL OBJECTIVES

A. The predicted and national norm quotients for pupils will be at least 85 per cent as shown by the Iowa Tests of Basic Skills.

B. Given periodic skills exercises in contextual and phonetic decoding, the pupils will demonstrate their knowledge of all skills learned to the point of testing 90 per cent accuracy.

C. Given verbal and/or written questions to make inferences, to get the main idea, to remember details, and to recognize organization and sequence, the pupils will complete the questions with 90 per cent accuracy.

D. Given a library with all reference materials contained within that library, the pupils will be able to answer questions appropriate to their level using the reference materials with 90 per cent accuracy.

E. Given appropriate readings, selected materials, and other motivations, the pupils will respond creatively through original stories, poems, and dramatic expressions as observed by the teacher.

F. Pupils diagnosed as possessing learning difficulties and/or lacking in specific skills, who are taught by the Career Opportunities Program (COP) persons, will make a statistically equivalent gain to those pupils who are not taught by COP persons.

G. Given the School Sentiment Index (SSI) and the Self-Appraisal Inventory (SAI) the pupils will show an improvement in attitudes for the 1972-73 school year over the 1971-72 school year.

V. VARIABLES

The variables treated in the program were:

A. Reading Skills

1. Word Knowledge.
2. Word Analysis.
3. Comprehension.

B. Self-Concept.

C. Attitude Toward School.

VI. MANAGEMENT AND CONTROL

The principal and staff cooperated to provide an improved instructional program in reading. The school personnel and some of the services they performed were as follows:

A. Principal

The principal purchased materials, monitored tests, attended team meetings, and provided the leadership for

the implementation of the instructional program. Additionally, the principal met with teachers and parents for conferences concerning individual pupil needs.

B. Lead Teacher

The lead teacher scheduled a time to release the classroom teachers for planning; assisted with inservice training; worked with the paraprofessionals in the areas of art, music, and physical education; attended team meetings; and provided leadership for those aides involved in the Instructional Assistance Program (IAP) and Career Opportunities Program (COP).

C. Teachers

The classroom teachers directed individual pupils and groups in reading. The teachers were released from classroom duties for one and one-half hours per week to do intensive planning for reading instruction. Also, they met with parents to foster a good relationship between the home and the school and to gain the assistance of parents in providing an instructional program to meet the needs of their children.

D. Paraprofessionals

The paraprofessionals, as previously mentioned, provided activities in art, music, and physical education while the regular classroom teachers planned in the area of reading; worked with a specific group of pupils during reading time; and provided the services of filing, duplicating, stapling, taping, and constructing games and materials for classroom teachers.

Inservice training included courses of study by individual teachers. For example, some teachers completed the modules entitled The Teaching of Reading. There was, also, a faculty workshop and team planning on an ell basis.

VII. PROCESS

The school was divided into five groups for instruction: kindergarten, primary, intermediate, upper, and special education. The areas for instruction are called ells. Levels K-3 were housed in the primary ell, 4-5 in the intermediate ell, 6-7 in the upper ell.

The areas of instruction were based on the open classroom plan and were designed for team teaching. However, very few of the staff members were oriented in team teaching. At present, the plan of instruction varies from ell to ell. Two of the ells, the intermediate and the upper, utilized a departmentalization type of team teaching; while the primary ell teamed on a level basis only. Each ell had a team leader, and the team leaders from the primary, intermediate, and upper ells along with the lead teacher and principal coordinated the instructional program for the year.

The Instructional Assistance Program (IAP) was divided into three phases. Phase one involved the releasing of classroom teachers for indepth planning of reading instruction. During this released time the pupils were engaged in art, music, and physical education activities.

Because the three paraprofessionals on the team were also Career Opportunities Program (COP) persons, phase two involved reading instruction with specified small groups. These small groups consisted of pupils who needed the closer contact, more indepth directions, reinforcement of skills, and the like. One of the paraprofessionals was placed on each of the three levels included in the program (primary, intermediate, and upper).

Phase three was an additional service designed to enable the classroom teacher to better utilize the reading instruction periods. On Wednesday, Thursday, and Friday mornings from 10:00-11:30 the paraprofessionals assisted the classroom teachers by filing papers, thermofaxing materials, running duplicating masters, making duplicating masters (by hand), taping stories, poems, etc., constructing materials when given an example, and recording scores (in record book only). This service was limited to reading.

The enrollment for the classes involved in the Instructional Assistance Program (IAP) was as follows:

First level	44
Second level	65
Third level	55
Fourth level	53
Fifth level	55
Sixth level	61
Seventh level	55
Total	388

Some of the tools, materials, and resources used to implement the program were as follows:

A. Basal and co-basal readers.

B. Library.

C. Audio-visual supplementary programs.

1. Taped series
2. Films and filmstrips
3. Talking Alphabet 1 and 2
4. Prepared masters
5. TV Magic Book.

D. Fieldtrips.

E. Vocabulary drills.

F. Reader's Digest Skill Builders and My Weekly Reader.

G. Extensive experience charts.

H. Maps, globes, and charts.

These tools and materials were used to enable the pupils to comfortably and competently work with decoding skills, comprehension skills, reference and study skills, and literary skills.

An example of the program activities during the year was a "Sing Along" which was held in the commons area of the building. The "Sing Along" involved all pupils in the Instructional Assistance Program (IAP). This was an opportunity for the various levels of pupils to share songs while with members of the Instructional Assistance Program team.

Beyond the technical aspects of the program, many related activities have been coordinated, supervised and/or assisted by the paraprofessionals. Vision screening, height checks, compiling of lists, lunch reports, and attendance checks were but a few.

VIII. EVALUATION

The program at Peyton Forest was evaluated in terms of the progress made in achieving goals and behavioral objectives. The following methods were used to measure the success of the school program:

A. Pupil progress in reading was assessed by the Pupil Achievement Study of the predicted and national norm quotients based on the Iowa Tests of Basic Skills.

B. The Comprehensive Instructional Program tests were used for measuring mastery of basic reading skills.

C. Teacher-made tests and tests accompanying basal reading text books, were administered to ascertain whether or not pupils were getting the main idea, remembering details, and the like.

D. Tests on lessons conducted in the library were administered by the librarian.

E. Readings, selected materials and other motivations, were given to inspire pupils to respond creatively, and their reactions were noted.

F. An attempt was made to compare the pupils taught by the Career Opportunities Program (COP) personnel and those not taught by COP personnel, as to the number or grade level, as shown by the Iowa Tests of Basic Skills.

G. The School Sentiment Index (SSI) and the Self-Appraisal Inventory (SAI) were administered to a random sample of pupils to compare with the 1971-72 results on the same two measures.

H. A cost analysis was made to determine the use of general and compensatory funds and their effect on the cost per unit of achievement index.

IX. FINDINGS

In order to determine whether or not the pupils met the objectives that were formulated by the principal and her staff each objective will be treated separately.

Objective A

Were the predicted and national norm quotients for pupils in reading at least 85 per cent as shown by the Iowa Tests of Basic Skills?

In FY 71 and FY 72 the Research and Development Division conducted studies to determine whether or not the pupils were performing as predicted (effective) and to determine their ratings according to national norms (acceptable). The FY 71 study was concerned with reading only while FY 72 included both reading and mathematics. Both years, the pupils at Peyton Forest did not perform as predicted, so the reading program was found to be neither effective nor acceptable.

During the 1972-73 school year members of the Research and Development Division made the Predicted Achievement Study of the reading and mathematics program in the elementary and middle schools. The predicted quotient (effective) and the national norm quotient (acceptable) were determined by using a model formulated to determine these quotients for a program which took into consideration the relative extent to which certain factors and measures influence pupil performance. Six factors, namely, per cent of paid lunches, per cent of attendance, pupil-teacher ratio, stability, 1972 Metropolitan Achievement Tests (MAT) posttests reading scores and 1972 MAT posttests arithmetic scores were used in the model to predict pupil performance. The weight of these factors was statistically determined by the linear multiple step-wise regression technique. The equation which resulted from this technique was applied to each school and each grade in order to determine the predicted performance level of that particular grade and school. The predicted quotient as defined in this model represents the relationship of the posttest Iowa Tests of Basic Skills (ITBS) composite score of a grade to the predicted score. The national norm quotient represents the relationship of the ITBS composite score of a grade to the national norm.

Table 1 includes both reading and mathematics data as well as composite data for the ITBS. Since the percentage at which a school was considered to meet the predicted quotient was ninety-eight per cent, it can be seen that the program in reading was

TABLE 1

PUPIL ACHIEVEMENT STUDY USING THE
IOWA TESTS OF BASIC SKILLS, APRIL, 1973
PEYTON FOREST ELEMENTARY SCHOOL

	GRADE EQUIVALENT SCORE			SUMMARY INDICES	
Grade	Actual	Predicted	National Norm	Predicted Quotient	National Norm Quotient
			READING TEST DATA		
2	2.3	2.8	2.7	83	83
3	3.3	3.2	3.8	101	87
4	4.4	4.0	4.7	110	93
5	4.8	4.8	5.7	99	84
6	5.5	5.5	6.7	99	81
7	6.5	6.2	7.6	105	85
			AVERAGE	99	85
			MATHEMATICS TEST DATA		
2	2.3	2.8	2.6	83	88
3	3.0	3.2	3.7	92	81
4	4.5	4.1	4.7	110	96
5	5.3	5.0	5.6	106	93
6	5.5	5.8	6.6	95	82
7	6.5	6.4	7.6	100	85
			AVERAGE	97	87
			COMPOSITE TEST DATA		
2	2.4	2.9	2.6	83	90
3	3.3	3.4	3.7	97	88
4	4.5	4.2	4.7	107	95
5	5.3	5.0	5.7	106	93
6	5.6	5.7	6.7	97	84
7	6.6	6.4	7.6	102	86
			AVERAGE	98	89

above this prediction. Also, the percentage at which a program should be was ninety per cent on the national norm quotient; therefore, it can be seen, for practical purposes, that Peyton Forest's program can be considered to meet the national norm quotient (acceptable). It's quotient is 89, only 1 point below 90. Thus, during the 1972-73 school year, the predicted quotient (effective) was more than eighty-five per cent in reading, and Objective A was met.

In examining all of the data in Table 1, Peyton Forest should be congratulated for their performance during the 1972-73 school year. Attention should be focused on grades four, five, and seven where the indices of predicted quotients on the composite data were higher than in the other grades.

Objective B

Given periodic skills exercises in contextual and phonetic decoding, did the pupils demonstrate their knowledge of the skills learned by scoring 90 per cent accuracy on tests?

The pupils were given many and varied opportunities in the classrooms to prove their mastery of contextual and phonetic decoding. According to the lead teacher and other school personnel, there were many instances in their daily work on which the pupils scored an accuracy of at least 90 per cent. (Examples of the types of activities on which the pupils were tested included those dealing with (1) prefixes and meanings, (2) syllables and accent marks, (3) compounds words and (4) vowel sounds. Additionally, the fact that the pupils met the predicted quotient as shown by Objective A, gives further evidence that many of the pupils had mastered the skills for successes in reading. However, an analysis of the data on the Iowa Tests of Basic Skills was made for grades one through seven on vocabulary. Since the skills generally tested in this subtest included the use of tools involved in word recognition (phonics, context clues, etc.); knowledge of the meanings of words; and sensitivity to fine differences in meaning and judgement in choosing the most appropriate word in a given context, it was believed that this would be another way of determining whether or not Objective B had been met.

The results of the analyses for the vocabulary test are shown in Table 2. The approximate numbers of pupils on or above grade level in each of the grades were as follows: 65 per cent for grade one; 44 per cent in grade two, 60 per cent in grade three, 85

per cent in grade four; 62 per cent in grade five; 30 per cent in grade six; and 20 per cent in grade seven. In grades one, three, four and five, over one-half of the pupils were on or above grade level in this particular skill. Additionally, the mean (or average) score was approximately on or above grade level for the majority of grades.

TABLE 2

RESULTS OF THE VOCABULARY AND WORD ANALYSIS SUBTESTS ON THE IOWA TESTS OF BASIC SKILLS

		Vocabulary		Word Analysis	
Grade	N	Per Cent On or Above Grade Level	Per Cent Below Grade Level	Per Cent On or Above Grade Level	Per Cent Below Grade Level
1	48	64.58	35.42	66.67	33.33
2	57	43.86	56.14	29.82	70.18
3	52	59.62	40.38	---	---
4	47	85.11	14.89	---	---
5	52	61.54	38.46	---	---
6	58	29.31	70.69	---	---
7	50	20.00	80.00	---	---

In grades one and two, a word analysis skill subtest was administered. Table 2, also, shows the results of the analysis of data for this particular skill. It can be seen that approximately 67 per cent of the first grade pupils were on or above grade level and approximately 30 per cent of second grade pupils were on or above grade level. The mean was above grade level for the first grade pupils but below grade level for the second grade pupils.

In summary, the data show that many of the pupils in grades one through seven on the vocabulary subtest, and in grades one and two for the word analysis subtest, were working on or above grade level in skills that directly relate to the stated objective. Thus, there were additional indications that the skills named in Objective B were mastered.

Objective C

Given verbal and/or written questions to (1) make inferences, (2) get the main idea, (3) remember details, and (4) recognize organization and sequence, did the pupils complete the questions with 90 per cent accuracy?

In talking with the lead teachers and other faculty members, it was reported to the research assistant that the majority of pupils completed questions on their daily work with at least 90 per cent accuracy; therefore, there were indications that Objective C was met. For example, the pupils were given many different types of activities which included reading for the main idea, selecting the topics of a paragraph, reading for details, arranging in correct sequence, reading for comprehension, and making inferences.

Additionally, the scores on the reading comprehension subtest were analyzed as shown in Table 3, for the pupils in grades one through seven. Some of the skills tested in this subtest included (1) recognizing and understanding important facts and details, (2) recognizing and understanding implied facts and relationships, (3) deducing the meaning of words or phrases from context, (4) detecting the main purpose of a paragraph or selection, (5) recognizing the main idea or topic of a paragraph or selection, and (6) recognizing proper time sequence. From the analyses, the approximate numbers of pupils working on or above grade level were as following: 65 per cent for grade one, 44 per cent for grade two, 52 per cent for grade three, 47 per cent for grade four, 29 per cent for grade five, 22 per cent for grade six, and 26 per cent for grade seven.

TABLE 3

RESULTS OF THE READING COMPREHENSION SUBTEST ON THE IOWA TESTS OF BASIC SKILLS

Grade	N	Per Cent On or Above Grade Level	Per Cent Below Grade Level
1	48	64.58	33.42
2	57	43.86	56.14
3	52	51.92	48.08
4	47	46.81	53.19
5	52	28.85	71.15
6	58	22.41	77.59
7	50	26.00	74.00

Although there were indications that Objective C was met for the majority of pupils in their classwork assignments, the results of the reading comprehension subtest show that skills associated with this subtest need to be mastered by some pupils, particularly in grades five, six, and seven.

Objective D

Given a library with reference materials, were the pupils able to answer questions appropriate to their level with 90 per cent accuracy?

This objective dealt mainly with the idea that the pupils who used the Science Research Associates (SRA) materials entitled Pilot Library would be able to show mastery of the materials with 90 per cent accuracy. (Of course, additional materials, found also in the library; were used with pupils.) Individual records were kept as each child worked with the programmed materials. A child began with materials that were relatively simple for him to master and progressed to those more complex in nature. Bearing this in mind, there were indications that this objective was met.

Objective E

Given appropriate readings, selected materials and other motivations did the pupils respond creatively through original stories, poems, and dramatic expressions as observed by the teacher?

For example, the pupils in all levels worked toward Objective E; however, the pupils in the upper levels were certainly able to respond to to a great degree than were the smaller pupils. This is not to say that the younger children were not creative for their age groups, for just the reverse was true.

Some evidences that the objective was met included numerous examples of stories, poems, and pictures that were sent to the research assistant by the lead teacher. Many of these samples were centered around seasonal activities. For example at Thanksgiving time there were a number of poems about turkeys. At Christmas time there were pictures and stories about the numerous activities associated with this season of the year.

Additionally, the research assistant attended a program in which all of the classes participated. The purpose of the program was to let the pupils express themselves through songs. Each class sang at least one song, and the entire group sang many songs.

The lead teacher reported that the pupils were given many opportunities of the type just mentioned in which to perform in plays, puppet shows, and the like; therefore, there were many indications that Objective E was met.

Objective F

Did the pupils diagnosed as possessing learning difficulties and/or lacking in specific skills, who were taught by the Career Opportunities program (COP) personnel (under the supervision of a teacher) make statistically equivalent gain to those pupils who were not taught by COP personnel?

The three paraprofessionals on the Instructional Assistance Program (IAP) team were also COP persons. Besides releasing teachers for planning time in reading, these three aides were involved in reading instruction with specified small groups of children. The small groups consisted of pupils who needed (1) the closer

contact of having a person work with them individually, (2) more indepth directions, (3) activities for the reinforcement of skills and the like.

Although the lead teacher believed that much progress was made by the pupils, with whom the aides worked, the groups were constantly changed. Actually, the COP personnel, therefore, worked at one time or another with the majority of the pupils, for as good teaching dictated no child was kept in a group when he was ready to progress to another group. Thus, no data were collected for comparison of those pupils taught by COP personnel and those not taught by these persons; therefore Objective F was not tested.

Objective G

Did the pupils show an improvement in attitudes as measured by the School Sentiment Index (SSI) and the Self-Appraisal Inventory (SAI)?

The School Sentiment Index (SSI) and the Self-Appraisal Inventory (SAI) were administered during the 1971-72 school year and the results were reported in the Research and Development Report, Volume VI, Number 21. For that school year twenty pupils from each level, one through five, were selected.

On December 7, 1972 the SSI and the SAI were administered to levels three and five. Twenty pupils from each level were randomly selected. Ten boys and ten girls were chosen from the third level. Of the twenty pupils, eighteen had attended Peyton Forest the previous year and two were new to the school. Eleven boys and nine girls were selected from the fifth level. Of the twenty pupils, sixteen had attended Peyton Forest the previous year, three were new in the school, and one had attended the school during the 1968-69 and 1969-70 school years.

According to the School Sentiment Index (SSI) the six dimensions of the learner's attitude toward schooling are:

1. Teachers, i.e., one's subjective feelings about teacher behavior with respect to instruction, authority and control, and inter-personal relationships with pupils;

2. School Subjects, i.e., one's differential attitudes toward various commonly-taught school subjects;

3. Learning, i.e., one's attitude toward the learning experience, independent of attitude toward school, teachers and subjects, as reflected in intellectual curiosity, willingness to study, interest in problem solving, etc;

4. School Social Structure and Climate, i.e. one's attitude toward his school as a social center, a rule making and rule enforcing entity, and an extra-curriculum opportunity system;

5. Peer, i.e., one's feelings regarding the structure of, and climate of relationships within the peer group;

6. General, i.e., one's general orientation toward schooling, independent of a particular school.

The results of the primary level SSI for the two years denoting the percentage of favorable responses are shown in Table 4.

TABLE 4

COMPARISON OF FAVORABLE RESPONSES
ON THE SCHOOL SENTIMENT INDEX
PRIMARY LEVEL

Year	N	Teacher	Peer	Subjects	General	School Climate	School Total
1971-72	60	.57	.63	.77	.59	.58	.63
1972-73	20	.51	.58	.84	.64	.58	.63

On the SSI the maximum response was 100 per cent. From the results on the primary level, it can be seen that the pupils during the 1971-72 had a more positive response toward the teacher, and their peers; however, for the 1972-73 school year the responses

were much more positive toward school subjects and toward school as a social center. Nevertheless, when a comparison was made of the overall results the percentages of positive responses were exactly the same for the two years.

The results of the intermediate SSI, for the two years, denoting the percentage of favorable responses are shown in Table 5.

TABLE 5

COMPARISON OF FAVORABLE
RESPONSES ON THE SCHOOL SENTIMENT INDEX
INTERMEDIATE LEVEL

Year	N	Teacher	Peer	Learning	General	School Climate	School Total
1971-72	40	.52	.62	.52	.41	.45	.50
1972-73	20	.59	.59	.62	.52	.54	.57

In comparing the results for the two years, it can be seen that during the 1971-72 school year the pupils' responses were more positive only on their attitude toward their peers. Overall, the responses were much more positive for the 1972-73 school year.

Also, it should be noted that for the two school years the pupils in the primary grades generally had more positive attitudes than did those pupils in the intermediate grades.

According to the Self Appraisal Inventory (SAI) the different dimensions of the learner's self-concept are:

1. Family, i.e., one's self-esteem yielded from family interactions;

2. Peer, i.e., one's self-esteem associated with peer relations;

3. Scholastic, i.e., one's self-esteem derived from success or failure in scholastic endeavors; and

4. General, i.e., a comprehensive estimate of how the self is esteemed.

The results of the scores denoting the percentage of favorable responses on the SAI for the primary level for school years 1971-72 and 1972-73, denoting the percentages of favorable responses, are shown in Table 6.

TABLE 6

COMPARISON OF FAVORABLE RESPONSES ON THE SELF-APPRAISAL INVENTORY

PRIMARY LEVEL

Year	N	Peer	Family	School	General	School Total
1971-72	60	.63	.61	.69	.79	.68
1972-73	20	.57	.50	.60	.78	.61

Since the maximum response was 100 per cent, from the results it can be seen that the pupils had more positive responses on each of the dimensions of the learner's self-concept for the 1971-72 school year than they did for the 1972-73 school year.

The results of the intermediate level SAI, for the school years 1971-72 and 1972-73, denoting percentage of favorable responses are shown in Table 7.

TABLE 7

COMPARISON OF FAVORABLE RESPONSES ON THE SELF-APPRAISAL INVENTORY

Intermediate Level

Year	N	Peer	Family	School	General	School Total
1971-72	40	.65	.66	.63	.64	.65
1972-73	20	.63	.67	.63	.74	.67

From the results it can be seen that the pupils' responses were only slightly more positive for the 1972-73 school year. Also, there was a two per cent more positive response toward peers for the 1971-72 school year. Additionally, it should be noted that there were no great differences in positive responses on the SAI between the primary and intermediate levels.

Although there were some improvements in attitudes in the year 1972-73 over the year 1971-72 as measured by the School Sentiment Index (SSI) and the Self-Appraisal Inventory (SAI), this was not true in all instances. Thus, Objective G was partially met as stated.

X. ADDITIONAL FINDINGS

Reading Survey

Although not included as an objective, the lead teacher conducted a survey in regard to reading during the week of May 21, 1973. A different question for each level in the school was used. For the second and third levels the pupils were asked, "Now that you've done some reading in lots of different interest areas what would you like to spend your time reading if you could choose?" The number of pupils who completed the survey was 110. The most frequent choices were the following:

A. Fairy Tales
B. Science
C. People (Fictitious and Real)
D. Animals
E. Textbooks

For the fourth and fifth level pupils the question was, "Of all the different reading activities you have done, which did you enjoy most and why?" The number of pupils who responded was 99. The most frequent reference was made to special stories, special activities, dramatizations, oral reading, and the use of Science Research Associates kits.

On the sixth and seventh levels the pupils were asked, "Do you feel that your reading speed and comprehension have improved in the last three months?" If the pupil answered "yes", he was

asked what has been most helpful to you, and if "no" he was asked what has hindered your progress. The number of pupils included in the survey was 102. The number of "yes" responses was 91 and the number of "no" responses was 11. Those pupils who answered "yes", said that practice (40 pupils), materials (37 pupils) and teacher assistance and/or interest (19 pupils) had been most helpful. The pupils who responded "no", said that lack of comprehension when trying to increase speed of reading, reading groups that were too large, insufficient spelling skills, and lack of interest in reading topics and materials hindered their progress most.

Comprehensive Instructional Program

An important facet of the reading program was the use of the Comprehensive Instructional Program (CIP) materials. The CIP reading diagnostic tests served as a valuable tool in diagnosing pupil weaknesses in reading. An example of how the results from the first administration of the CIP tests were tabulated, to be used by teachers, is shown in Table 8.

TABLE 8

RESULTS FROM THE COMPREHENSIVE INSTRUCTIONAL PROGRAM TESTS

Tests	First Level		
	Number of Pupils	Pupils Who Passed	Percent Who Passed
A1 Hearing Differences in Words	44	33	75
A2 Hearing Similar Beginning Sounds	44	36	82
A3 Matching Letters	44	42	95
A4 Matching Letters	44	44	100
A5 Hearing Similar Ending Sounds	44	21	48
A6 Hearing Rhyming Words	44	25	57
A7 Seeing Likenesses and Differences	44	38	86
A8 Seeing Likenesses and Differences	44	33	75
B1 Identification of Letters	43	34	79
B2 Identification of Letters	43	29	67
B3 Sight Vocabulary	43	16	37
B4 Sight Vocabulary	43	17	40

TABLE 8 (Con't)

Tests	Second Level Number of Pupils	Pupils Who Passed	Percent Who Passed
A1 Hearing Differences in Words	36	28	78
A2 Hearing Similar Beginning Sounds	36	21	58
A3 Matching Letters	36	33	92
A4 Matching Letters	36	32	89
A5 Hearing Similar Ending Sounds	36	7	19
A6 Hearing Rhyming Words	36	16	44
A7 Seeing Likenesses and Differences	36	31	86
A8 Seeing Likenesses and Differences	36	25	69
B1 Identification of Letters	33	19	58
B2 Identification of Letters	33	18	55
B3 Sight Vocabulary	33	12	36
B4 Sight Vocabulary	33	13	39
C1 Initial Sounds	30	30	100
C2 Final Sounds -- Single Consonants	30	29	97
C3 Initial Sounds -- Consonant Digraphs and Blends	30	27	90
C4 Vowel Sounds -- Single, Digraph, Diphthong	30	15	50
C5 Hearing Syllables	30	3	10
C6 Syllabication	30	3	10
C7 Finding Root Words in Larger Words	30	0	0
C8 Adding Endings to Words	30	1	3
C9 Finding Roots in Compounds	30	13	43
C10 Contractions	30	8	27
D1 Main Idea, Implied Idea, Details	2	0	0
D2 Story, Pred. Outcomes and actions, Disc. Fact & Fiction, Disc. Fact & Opinion	2	0	0

Tests	Third Level Number of Pupils	Pupils Who Passed	Percent Who Passed
A1 Hearing Differences in Words	9	8	89
A2 Hearing Similar Beginning Sounds	9	5	56
A3 Matching Letters	9	9	100
A4 Matching Letters	9	9	100
A5 Hearing Similar Ending Sounds	9	4	44
A6 Hearing Rhyming Words	9	7	78

TABLE 8 (Con't)

Tests		Third Level Number of Pupils	Pupils Who Passed	Percent Who Passed
A7	Seeing Likenesses and Differences	9	9	100
A8	Seeing Likenesses and Differences	9	9	100
B1	Identification of Letters	9	8	89
B2	Identification of Letters	9	9	100
B3	Sight Vocabulary	9	8	89
B4	Sight Vocabulary	9	7	78
C1	Initial Sounds	31	31	100
C2	Final Sounds - Single Consonants	31	31	100
C3	Initial Sounds -- Consonant Digraphs and Blends	31	25	81
C4	Vowel Sounds -- Single, Digraph, Diphthong	31	19	61
C5	Hearing Syllables	31	15	48
C6	Syllabication	31	3	10
C7	Finding Root Words in Larger Words	31	3	10
C8	Adding Endings to Words	31	3	10
C9	Finding Roots in Compounds	31	17	55
C10	Contractions	31	5	16
D1	Main Idea, Implied Idea, Details	43	1	2
D2	Story, Pred. Outcomes and actions, Disc. Fact & Fiction, Dis. Fact and Opinion	24	3	13

From this tabulation of the results of the fall testing in 1972, the teachers could see the skill areas in which the pupils showed the most weaknesses. (The per cent who passed means that they passed with 90 per cent accuracy.) For example, the per cent who passed (with 90 per cent accuracy) the sight vocabulary on the first level was only 37 per cent. On the second level, this was found to be an area in which the pupils needed additional practice, also. For the third level pupils, it can be seen that there was a need for much work in getting the main idea from reading, the implied idea and the like. Through this process, the teachers assisted each pupil with working in his area of most difficulty.

Since, the first testing time was chosen to use as an example, it must be remembered that the pupils were tested two other times during the year with the CIP tests. Of course, daily diagnostic

evaluation was made on the progress of the pupils.

Instructional Assistance Program Aides

In the Instructional Assistance Program (IAP) schools, where there were educational aides, the teachers participated in a survey to help assess the value of the IAP. The first five items on the survey included a 25-point scale on which the teachers rated that the aides were "definitely not" effective to "definitely yes" the aides were effective. Also, there were four questions to be answered by "yes" or "no" on the form.

The results in Table 9 of the survey at Peyton Forest with thirteen teachers participating showed a mean ranging from 17.5 to 22.5 on the first five items. The answers for the four questions were generally very positive; however, the answer to question six concerning continuation of the program showed 92 per cent of the answers were "yes" whereas the previous school year there was 100 per cent agreement that the program should be continued.

Teaching Personnel's Attitude

During the 1972-73 school year, members of the Division of Research and Development conducted a study which sought to assess the environment of a sample of elementary schools in the Atlanta School System. The philosophy behind the study was that if a school is to move toward individualization of instruction then the total school setting must be favorable to individual growth and learning and must be of an organizational framework which promotes individualization.

Operating under the assumption that teachers' attitudes toward education play an important role in creating the school environment, efforts were made to assess the prevailing attitudes in 32 schools and to determine their relationship with achievement in those schools. The teachers and paraprofessionals in the 32 sample schools were asked to respond to an instrument, Opinionnaire on Attitudes Toward Education, which was developed by H.C. Lindgren and G.M. Patton (1958).

This instrument used was a 50-item scale constructed by Lindgren and Patton to measure attitude toward child-centered policies and practices in education. The statements were concerned with the desirability of understanding the behavior of students, the desirability

TABLE 9

EFFECTIVENESS OF THE INSTRUCTIONAL ASSISTANCE PROGRAM AIDES AT PEYTON FOREST ELEMENTARY SCHOOL (N=13) 1971-72 AND 1972-1973

	1971-72		1972-73	
	Mean	S.D.	Mean	S.D.
1. Was the assistance given by the IAP aides effective in enhancing the music program?	14.5	5.4	17.8	4.3
2. Was the assistance given by the IAP aides effective in enhancing the art program?	16.7	3.5	17.5	3.6
3. Was the assistance given by the IAP aides effective in enhancing the physical education program?	19.5	3.9	20.6	3.5
4. Was the assistance given by the IAP aides effective in providing help in miscellaneous areas?	22.3	1.6	18.2	3.8
5. Was the planning time provided the regular classroom teachers by being relieved by the IAP aides beneficial?	24.5	0.8	22.5	1.9

	Per Cent	Response	Per Cent	Response
6. Would you like to see this program continued next year?	100%	yes	92%	yes
7. Have the pupils reacted favorably to the aides in the IAP?	100%	yes	100%	yes
8. Could you have accomplished the planning activities without the aid of the IAP aides?	83%	no	69%	no
9. In general, was the attendance of the IAP aides satisfactory?	100%	yes	100%	yes

Note: In regard to question eight, one teacher responded that the planning would have been done but that the teachers could not have accomplished as much or done it as well without the aides. Another teacher commented that without the aides, plans would not have been as detailed nor would she have been able to make instructional aids at school.

of the teacher's using authoritarian method as a means of controlling the behavior of students, and the desirability of subject-matter-centeredness as contracted with the learner child-centeredness.

The attitude score was the number of positive items agreed with plus the number of negative items disagreed with, where positive items are favorable toward child-centered practices. The theoretical range of score was from 0 to 50, with the highest score indicating more favorable attitudes toward child-centered policies and practices in education.

The teachers and paraprofessionals at Peyton Forest, along with 31 other schools, responded to the questionnaire. The mean score for all respondents, along with the indices of predicted quotient and national norm quotient, as described in Objective A, were considered.

According to the data reported, the mean score for attitudes toward education was 36.2 with scores ranging from 34.1 to 39.0. These scores indicated that teachers and aides in all of the sample schools favor child-centered policies and practices in education to varying degrees. The range in indices of predicted quotient was from 87 to 121 and 63 to 94 on the national norm quotient. The mean for Peyton Forest was 34.6 with the index of predicted quotient 98 and national norm quotient 89.

An intercorrelation matrix, including each school's total school attitude score, index of predicted quotient, and index of the national norm quotient was computed. No significant correlation was found between attitude toward education and index of predicted quotient or attitude toward education and national norm quotient as shown in Table 10.

TABLE 10

CORRELATION MATRIX OF TEACHERS, AND AIDES' ATTITUDE TOWARD EDUCATION SCORES, INDICES OF PREDICTED QUOTIENT AND NATIONAL NORM QUOTIENT OF THE INSTRUCTIONAL PROGRAMS OF 32 ATLANTA SCHOOLS 1972-73

	Attitude Toward Education	Index of Predicted Quotient	Index of National Norm Quotient
Attitude Toward Education	1.000	-0.057	-0.030
Predicted Quotient	---	1.000	0.796
National Norm Quotient	---	---	1.000

A conclusion drawn from this study was that there was no relationship between teachers' and paraprofessionals' attitudes toward education, whether child-centered or subject-matter-centered, and the predicted achievement quotient or the national norm quotient.

XI. COST ANALYSIS

In order to determine the cost per unit of achievement index, a cost analysis was made. The data in Table 11 show the total school's (K-7) average daily attendance (ADA) and the ADA for each grade.

The expenditures have been separated into two sections entitled (1) general funds (salary and non-salary) and (2) compensatory funds (salary and non-salary). The cost for food services, new equipment, or capital outlay is not included. The figures were computed from the June 30, 1973 General Funds Financial Report and the Trust and Agency Report, 1973. The figures pertaining to per pupil cost are broad estimates and are not to be misinterpreted as being exact or refined.

TABLE 11

COST ANALYSIS
TOTAL SCHOOL AVERAGE DAILY ATTENDANCE (ADA)
K - 7 -- N = 414

	Grade								
	Kdg.	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Average
Average Daily Attendance	34	45	62	55	53	52	60	52	52
Per Pupil Cost									
A. General Funds									
1. Regular									
a. Salary	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83
b. Nonsalary	68.21	68.21	68.21	68.21	68.21	68.21	68.21	68.21	68.21
c. Total	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04
2. Total General Funds									
a. Salary	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83	$ 675.83
b. Nonsalary	68.21	68.21	68.21	68.21	68.21	68.21	68.21	68.21	68.21
c. Total	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04	$ 744.04
B. Compensatory Funds									
1. IAP									
a. Salary	$ -0-	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 65.25
b. Nonsalary	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
c. Total	$ -0-	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 65.25
2. Title II									
a. Salary	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-
b. Nonsalary	2.51	2.51	2.51	2.51	2.51	2.51	2.51	2.51	2.51
c. Total	$ 2.51	$ 2.51	$ 2.51	$ 2.51	$ 2.51	$ 2.51	$ 2.51	$ 2.51	$ 2.51
3. Total Compensatory Funds									
a. Salary	$ -0-	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 71.10	$ 65.25
b. Nonsalary	2.51	2.51	2.51	2.51	2.51	2.51	2.51	2.51	2.51
c. Total	$ 2.51	$ 73.61	$ 73.61	$ 73.61	$ 73.61	$ 73.61	$ 73.61	$ 73.61	$ 67.76
C. Total Per Pupil Cost									
1. Salary	$ 741.09	$ 746.93	$ 746.93	$ 746.93	$ 746.93	$ 746.93	$ 746.93	$ 746.93	$ 746.48
2. Nonsalary	2.51	70.72	70.72	70.72	70.72	70.72	70.72	70.72	65.07
3. Total	$ 743.60	$ 817.65	$ 817.65	$ 817.65	$ 817.65	$ 817.65	$ 817.65	$ 817.65	$ 811.55
Predicted Achevement Quotient	---	---	83	97	107	106	97	102	98
Cost Per Unit of Predicted Achievement Quotient									
A. General Funds	---	---	$ 8.96	$ 7.67	$ 6.95	$ 7.02	$ 7.67	$ 7.29	$ 7.59
B. Compensatory Funds	---	---	0.89	0.76	0.69	0.69	0.76	.72	.69
C. Total	---	---	$ 9.85	$ 8.43	$ 7.64	$ 7.71	$ 8.43	$ 8.01	$ 8.28

According to the data in Table 11, the per pupil cost was a narrow range of $743.60 for kindergarten to $817.65 for each of the other grades. Also, in grades two through seven the cost per unit of predicted quotient only ranged from $7.64 in grade four to $9.85 for the second grade. In other words, there was little variance in the cost per unit of predicted achievement quotient among the grades.

XII. CONCLUSIONS

There were many indications that Peyton Forest improved their reading program during the 1972-73 school year. These included the following:

A. The pupils had a program in reading that was shown to be effective when compared to other programs within the school system.

B. On skill exercises in contextual and phonetic decoding, the pupils demonstrated their knowledge of the skills learned by scoring 90 per cent accuracy on the tests.

C. It was reported that pupils answered questions in their daily work in which they made inferences, identified the main idea of a paragraph or story, remembered details, and recognized the organization and sequence of a story with at least 90 per cent accuracy.

D. The pupils showed their abilities to answer questions concerning the use of library materials with 90 per cent accuracy.

E. The Comprehensive Instructional Program (CIP) contributed to the instructional program by providing materials for systematic diagnosis of reading in grades one through three.

F. Data were not available to prove that those pupils taught by aides in the Career Opportunities Program (COP) made statistically equivalent gains to those pupils who were not taught by COP personnel.

G. The Instructional Assistance Program (IAP) continued to enhance the total instructional program by providing a lead teacher and three aides who (1) released the classroom teachers for planning time in reading; (2) assisted the teachers with instructional activities and the preparation of materials; and (3) provided enrichment activities in art, music, and physical education for pupils.

H. According to a survey about the IAP, the teachers believed that the pupils reacted favorably to the aides.

XIII. RECOMMENDATIONS

The following recommendations are based upon the content of this report and upon discussions between the school faculty and the research assistant:

A. The principal and her staff should be commended for the gains made by the pupils during the 1972-73 school year at Peyton Forest School and they should begin the 1973-74 program by formulating consistent and comprehensive objectives at the beginning of the school year.

B. Efforts should be made to further identify the successful practices and techniques which were used to make the advancements in reading exhibited by the pupils.

C. The pupils to be evaluated for the 1973-74 school year should be given a pretest and a posttest in order to determine achievement gains accurately.

D. Continued emphasis should be placed on improving the attitudes of pupils and on involving parents in, and with, the education of their children.

E. The faculty should formulate and proceed with plans which would result in a positive and significant correlation between pupil achievement and expenditures.